



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,578	11/25/2003	Eugene P. Rivers JR.	95857	2306

7590 09/07/2004

MATTHEW J. BUSSAN  
NAVAL SURFACE WAREFARE CENTER  
DAHLGREN DIVISION  
17320 DAHLGREN ROAD CODE XDC1  
DAHLGREN, VA 22448-5110

EXAMINER

HOLZEN, STEPHEN A

ART UNIT	PAPER NUMBER
----------	--------------

3644

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/729,578

**Applicant(s)**

RIVERS, EUGENE P.

**Examiner**

Stephen A. Holzen

**Art Unit**

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 10, 11, 12, 16, 21, 22, 23, 24, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al (3,517,584) in view of Caddie (NPS/CIRPAS Activity Summary). Robinson discloses a payload dispensing system remotely controlled from the ground (see Col. 4, lines 40-44), a payload dispenser which is controlled remotely (Col. 4, lines 40-44), a magazine holding the payload having tubes containing capsules and cartridges actuating device and a controller for generating electrical signals to the cartridge actuating device (see Figures 1-2). Caddie discloses that it is well known in the art to use a payload dispensing system which is controlled remotely in an unmanned aerial vehicle. It would have been obvious at the time of the invention to one having ordinary skill in the art to include the teachings of Caddie in view of Robinson et al for the purpose removing a pilot from a dangerous situation.

Re - Claim 5, 16: Robinson discloses an aircraft having a bomb bay with an opening and a magazine mounted in the bomb bay such that the capsules are ejected from the opening.

Art Unit: 3644

Re - Claims 10 and 11: Robinson et al in view of Caddie disclose all the aspects and limitations of these claims.

3. Claims 2-4 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al as applied to claim 1 above, and further in view of Burchfiel (6,678,590). Burchfiel discloses that it is known in the art to use frontward and downward facing video cameras in unmanned aircraft to allow a remote operator and pilot for increased reconnaissance. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a forward and downward facing camera for the purpose is increasing reconnaissance capabilities.

4. Claims 6, 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al (3,517,584) as applied to claim 1 above, and further in view of Marks et al (5,461,960). Marks et al disclose an aerial dispenser having a breach plate, which allows timing for the deployment of a payload (#5). It would have been obvious to one having ordinary skill in the art to include the breach plate of Marks in the device of Robinson for the purpose of sequential firing and deployment of the payload.

5. Claims 7, 8, 18, 19, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al (3,517,584) as applied to claim 1 above, and further in view of Schillreff et al (3,808,940).

Art Unit: 3644

Re - Claim 7, 18, and 26: Robinson discloses a tube having an opposite end with a cartridge-activating device at one end, however does not disclose the other end having a cap. Schillreff et al discloses that it is well known in the art to have a cap at the other end. (See Col. 2, lines 49-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include caps on the payload dispenser to protect the non-fired rounds from the environmental conditions.

Re - Claim 8, 19, 27: Robinson et al does not disclose a plastic cap. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plastic cap since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In Re Leshin 125 USPQ 416.

6. Claims 9, 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson as applied to claim 1 above, and further in view of Mayersak. Robinson discloses every aspect of the applicant's invention except wherein said payload dispenser system further comprises a differential GPS receiver providing output signals to an input port of the computer. Mayersak however discloses that it is known to use GPS to provide output signals to an input port of a computer. (See Figure 1) It would have been obvious to one having ordinary skill in the art, at the time the invention was made to employ GPS to provide output signals to increases the operability of the aircraft from a remote location.

Art Unit: 3644

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 703 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sah

  
**TERI P. LUU**  
**SUPERVISORY PRIMARY EXAMINER**